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ALL ALBERTA STUDY 1989
(Including The Edmonton Area Study)

SAMPLING REPORT

by

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INTRODUCTION

The 1989 All Alberta Study (AAS) was the third in an annual series administered by the Department of Sociology, University of Alberta, through its research facility, the Population Research Laboratory (PRL). This random sample survey of households in the province of Alberta has enabled academic researchers, local community agencies, and government departments to explore a broad spectrum of social issues in an on-going research framework in Alberta.

This report describes the sampling design, data collection methods, and weighting technique used in the 1989 All Alberta Study. Also, a brief demographic profile of the sample and a description of the data collection statistics from 1987 to 1989 are presented. Subsequent papers on findings from the 1989 AAS will be announced in the PRL's "In Summary" newsletter.

SAMPLING DESIGN

Main features of the sampling design are as follows:

1. Province of Alberta delineated into three areas.

   a. City of Edmonton for face-to-face interviewing.
   b. City of Calgary for telephone interviewing.
   c. Remainder of the Province for telephone interviewing (Other Alberta Areas).

2. Two-stage selection process.

   a. Selection of households.
   b. Selection of respondent within each household.

To retain the comparability of the Edmonton face-to-face sample with past Edmonton Area Studies (EAS), a sample size of 400 or more was deemed necessary. This would also permit Edmonton to be analyzed as a separate entity. On the other hand, the sample sizes for Calgary and Other Alberta were primarily determined by budgetary constraints. However, at the same time a minimum sample size was sought to permit separate analysis for these two areas.

POPULATION FOR FACE-TO-FACE INTERVIEWING - EDMONTON

The 1989 Edmonton population universe was designated as all persons 18 years of age or older who at the time of the survey were living in a dwelling unit that was enumerated during the City of Edmonton Civic Census in the spring of 1987.

SAMPLE SELECTION FOR FACE-TO-FACE INTERVIEWING - EDMONTON

As in previous Edmonton Area Studies, the sampling frame consisted of a computerized list of addresses compiled by the City of Edmonton from their most current enumeration (1987). From the computer tape, a simple random sample of 620 addresses was selected for personal interviewing. Nursing homes, military and temporary residences were deleted from the sample. Within the household, one eligible person was selected as the respondent for the one hour interview.

Interviewers were instructed to obtain an equal number of male and female respondents within their allotment of interviews. As adult males are generally more difficult to contact, the following selection procedure

guidelines were set for the interviewers to assist them in obtaining their quotas.

a. The dwelling unit must be the person's usual place of residence and he/she must be 18 years of age or older.

b. If an adult male answers the door and is willing to be interviewed, he is the respondent.

c. If an adult female answers the door and there is an adult male present who is willing to be interviewed, interview the male. If the male is not willing to be interviewed, and the female is willing, interview the female.[1]

d. If an adult female answers the door and there is no adult male present, choose her as the respondent.

The final breakdown of the EAS sample by sex of respondent, using the above procedures, was:

Male	Female	Total
48.3%	51.7%	100%

POPULATION FOR TELEPHONE INTERVIEWING - CALGARY AND OTHER ALBERTA AREAS[2]

The population universe designated for telephone interviewing was all persons 18 years of age or older who, at the time of the survey, were living in a dwelling unit in Alberta outside of the City of Edmonton that could be contacted by direct-dialing. From this population, two samples were drawn to cover the area: the first one represented the City of Calgary, and the second represented the remainder of the region.

SAMPLE SELECTION FOR TELEPHONE INTERVIEWING - CALGARY & OTHER ALBERTA AREAS

For the past three studies, the PRL has developed computer files of working five-digit telephone banks covering the whole of Alberta. The samples of telephone numbers for Calgary and Other Alberta Areas were generated from these files by selecting, with replacement, a simple random

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1 Fifty-nine percent of the first eligible persons encountered were female. In households where a completed interview was obtained, 89% of the first eligible persons accepted.

2 Remainder of the Province, excluding Edmonton and Calgary.

sample of banks for each area and appending a random number between 00 and 99 to each number selected. All duplicate numbers were discarded.

As with the face-to-face interviewers, the telephone interviewers were given instructions to obtain an equal number of male and female respondents. Again, as adult males are generally more difficult to contact, the selection procedure guidelines were exactly the same as they were with the face-to-face interviewing.

The final breakdown of the samples by sex of the respondent, using the above procedures, was:

SAMPLE AREA	Male	Female	Total
Calgary	51.9%	48.1%	100%
Other Alberta	48.5%	51.5%	100%

THE QUESTIONNAIRES

Two questionnaires were used for the Study, one for the face-to-face component and one for the telephone component. All the telephone questions (modified slightly for suitable administration over the telephone) were taken from the face-to-face instrument, which was about twice the length of the telephone questionnaire. No response categories or scales were altered.

The questionnaires contained a wide variety of questions reflecting the specific research interests of the many University researchers and outside agencies participating in the Study. However, as in previous years, there was a special topic, in this case, "The Changing Family in Alberta." A number of questions are replications from previous questionnaires (see the Appendix for a complete listing of all the areas covered). Both questionnaires were pretested on a total of sixty-three Edmonton householders, and necessary modifications were made before actual interviewing began.

DATA COLLECTION

DATA COLLECTION FOR FACE-TO-FACE INTERVIEWING - EDMONTON

A total of 31 trained interviewers from the PRL interviewing pool conducted the interviews which began February 5th. In the week prior to the commencement of the fieldwork, an introductory letter was sent to each selected address.[3] It briefly described the nature of the study and advised the residents of the household that they should expect a visit from an interviewer in the near future.

If the interviewers were unsuccessful in establishing contact on their first visit, they were to make four callback attempts before declaring an address as "no contact." At the outset of the interview the interviewer advised the respondents that their participation is voluntary and their responses would be kept completely confidential.

Data collection took six weeks with 66% of the interviewing being completed during the first two weeks. Monday had the highest number of completions while Friday had the fewest completions. The average interviewer completed 14 interviews. Forty addresses were found to be ineligible, vacant or demolished buildings. Deletion of these addresses represented corrections to the sampling frame rather than non-response addresses.

A random sample of completed interviews (15%) were verified through a series of checks which included re-contacting respondents by telephone. Any significant discrepancies or irregularities were investigated and rectified.

DATA COLLECTION FOR TELEPHONE INTERVIEWING - CALGARY AND OTHER ALBERTA AREAS

The telephone interviewing began February 6th and was completed by the end of February. A total of twelve interviewers did the long-distance calling from the University of Alberta using "WATS" lines.

If the interviewers were unsuccessful in establishing contact on their first call, they were to make ten callback attempts before declaring a telephone number as "no contact." Upon making contact, the interviewer identified herself, verified the telephone number, and then asked the screening questions for selecting the respondent. Before administering the questionnaire the interviewer advised the respondents that their

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3 Initial sample size as drawn from the tape was 620.

participation is voluntary and their responses would be kept completely confidential.

The telephone data collection took four weeks, with 69% of the interviewing being completed during the first two weeks. The average interviewer completed 62 interviews. Fifteen percent of the completed interviews were verified. Any significant discrepancies or irregularities were rectified.

Tables 1 and 2 show the percentage of the interviews obtained according to the number of callbacks and other data collection statistics for the three samples, with comparisons to 1988 results.

TABLE 1

CALLBACKS FOR TELEPHONE AND FACE-TO-FACE SAMPLES

CALL-BACKS	OTHER ALBERTA TELEPHONE			CALGARY TELEPHONE			EDMONTON FACE-TO-FACE		
	1987	1988	1989	1987	1988	1989	1987	1988	1989
0	40%	30%	34%	29%	26%	25%	32%	25%	29%
1	26	22	21	25	25	21	31	30	33
2	11	16	11	16	16	14	18	20	15
3	8	11	9	10	12	11	11	10	10
4+	16	21	26	20	21	30	9	16	13
	101%	100%	101%*	100%	100%	101%	101%	101%	100%

*Total does not equal 100% due to rounding error.

TABLE 2

DATA COLLECTION SUMMARY

PARAMETERS	OTHER ALBERTA			CALGARY			EDMONTON		
	YEAR			YEAR			YEAR		
	87	88	89	87	88	89	87	88	89
	%	%	%	%	%	%	%	%	%
1ST CONTACT INTERVIEWS	40	30	34	29	26	25	32	25	29
BEFORE 6 PM WEEKDAYS INTERVIEWS	65	62	40	52	43	41	57	41	32
MONDAY TO FRIDAY INTERVIEWS	75	70	70	78	75	74	74	74	75
WITHOUT APPOINTMENT INTERVIEWS	83	67	63	73	72	58	55	51	60
RESPONSE RATE	81	80	80	77	73	75	76	80	76
MEDIAN INTERVIEWING TIME (MINUTES)	26	30	29	27	33	28	58	55	60
SAMPLE SIZE	347	433	377	244	372	370	454	464	443

From Table 2 the final response rates for the three samples were: 80% for Other Alberta, 75% for Calgary, and 76% for Edmonton.

Table 3 shows the final result of the initial sample selections.

TABLE 3

BREAKDOWN DISPOSITIONS OF ORIGINAL SAMPLES

	OTHER ALTA	CAL	EDM	OTHER ALTA	CAL	EDM
	ACTUAL			%	%	%
ORIGINAL SAMPLE DRAWN	885	886	620	100.0	100.0	100.0
Deduct:						
non-residential/ ineligible	128	183		14.4	20.7	
not in service/ vacant/demol.	279	208	40	31.5	23.5	
2nd residence	6			.7	.5	6.5
CORRECTED SAMPLE	472	491	580	53.3	55.4	93.5
BREAKDOWN OF CORRECTED OF SAMPLE						
completed interviews	377	370	443	79.9	75.4	76.3
incomplete interviews	5	3	13	1.1	.6	2.4
no answer/contact	21	24	20	4.4	4.9	3.4
refused	69	83	96	14.6	16.9	16.6
language problem	-	6	8		1.2	1.4
illness	-	5	-		1.0	
TOTAL	472	491	580	100.0	100.0	100.1

CALCULATION OF WEIGHTS

The final sample obtained for each area is not proportional to the Alberta population it represents. For instance, Edmonton is over-sampled (Table 4). Edmonton makes up only 26% of the Alberta population but has 37% of the interviews. Therefore, in order to combine the samples for a provincial sample, weighting was necessary.[4] The following table contains

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4 If the samples are analyzed individually, then no weighting is necessary; for example, if the researcher is only interested in the Edmonton responses. In the SPSSx program prepared by the PRL weighting is turned off with: WEIGHT OFF. To turn weighting on insert: WEIGHT BY WT.

the information used to calculate the weights.

TABLE 4

CALCULATION OF WEIGHTS

	POPULATION 20+ 1986	PERCENT OF POP.	SAMPLE SIZE	PERCENT OF SAMP.	WEIGHT FACTOR	WEIGHTED SAMPLE
EDMONTON	413,530	25.4904%	443	37.2269%	.684731	303
CALGARY	454,805	28.0346	370	31.0924	.901654	334
OTHER ALBERTA	753,965	46.4750	377	31.6807	1.466981	553
TOTAL	1,622,300	100.0000%	1190	100.0000%		1190

DATA

The raw data file exists in 80 column card image format and is stored on magnetic tape. The data were tabulated and cleaned in accordance with generally accepted survey research practices using OSIRIS and SPSSx statistical packages, and microcomputer programs developed by the PRL. The rectangular data set contains 426 variables for each case. There are a total of 1190 cases with 9 decks per case. A SPSSx systems file with labels has been created to analyze the data. In tabulating the data, the two questionnaires were coded in exactly the same manner to permit merging of the data without adjustments.

Access to the data has been restricted (until January 1, 1990) to agencies and persons participating in the survey.

DEMOGRAPHIC PROFILE

Table 5 presents some of the major demographic characteristics of the 1987, 1988, and 1989 AAS samples. Household and individual income distributions for the three samples are given in Tables 6 and 7.

TABLE 5

DEMOGRAPHIC PROFILE OF 1987, 1988, AND 1989 AAS RESPONDENTS

CHARACTERISTICS	OTHER ALTA			CALGARY			EDMONTON		
	87	88	89	87	88	89	87	88	89
	%	%	%	%	%	%	%	%	%
RELIGION									
Protestant	64	65	57	50	53	47	46	45	48
Roman Catholic & Other Catholic	22	21	26	25	20	26	31	24	26
Other	2	1	2	3	3	5	5	5	6
No Preference/affiliation	12	14	15	23	25	23	18	26	20
LEVEL OF RELIGIOSITY									
strong	35	32	33	33	34	37	33	37	40
not very strong	50	55	50	58	52	46	55	53	47
somewhat strong	15	13	17	9	15	16	12	11	13
EDUCATION (years of schooling)									
less than 12 years	37	29	30	16	20	18	31	24	24
12-15 years	50	55	54	54	50	55	49	50	53
greater than 15 years	13	16	16	30	30	27	20	26	23
DWELLING UNIT									
single-detached house	77	76	75	58	64	64	54	55	51
multiple family apartments	9	10	9	21	17	18	29	29	31
row/townhouse	3	3	4	9	10	8	9	10	11
semi-detached/duplex	4	4	3	11	7	9	6	3	5
other types	7	8	9	2	2	2	2	2	1
EMPLOYMENT STATUS									
full-time	49	51	50	51	55	61	48	52	54
part-time	13	18	15	14	13	9	12	11	10
other (e.g. keeping house etc.)	38	31	36	35	32	30	40	38	37
HOME OWNERSHIP									
own	74	72	71	58	64	59	54	53	47
rent	26	28	29	42	36	42	46	47	54
MEDIAN AGE IN YEARS	40	37	39	33	35	35	38	34	34

TABLE 6

HOUSEHOLD INCOME

INCOME CATEGORIES	OTHER ALTA	CALGARY	EDMONTON
	%	%	%
UNDER $20,000	20.5	13.9	26.8
$20,000 - $39,999	30.6	28.7	35.2
$40,000 - $59,999	30.0	28.0	21.7
$60,000 AND OVER	18.9	29.4	16.3
TOTAL	100.0	100.0	100.0

TABLE 7

INDIVIDUAL INCOME

INCOME CATEGORIES	OTHER ALTA	CALGARY	EDMONTON
	%	%	%
UNDER $12,000	38.2	24.0	36.0
$12,000 - $23,999	24.8	26.8	24.2
$24,000 - $35,999	20.6	24.6	22.7
$36,000 AND OVER	16.4	24.6	17.1
TOTAL	100.0	100.0	100.0

TABLE 8

HOUSEHOLD SIZE DISTRIBUTIONS

	OTHER ALBERTA			CALGARY			EDMONTON		
HOUSEHOLD SIZE	1987	1988	1989	1987	1988	1989	1987	1988	1989
	%	%	%	%	%	%	%	%	%
1 PERSON	16	14	12	19	17	19	24	28	23
2 PERSONS	31	30	35	31	34	30	28	30	32
3 PERSONS	22	18	16	18	19	19	19	19	17
4 PERSONS	20	21	24	23	19	21	17	15	17
5 PERSONS	8	13	9	7	8	10	8	6	8
6 PERSONS	2	3	2	2	2	2	2	2	3
7+ PERSONS ...	1	2	1	0	1	0	1	1	1
	100	101	99	100	100	101	99	101	101

SAMPLE REPRESENTATIVENESS

The 1989 AAS age distributions and marital status distributions are compared to the most current Statistics Canada data[5] in Tables 9 and 10 respectively. The the indexes of dissimilarity[6] for each Table demonstrate that AAS samples have adequately reflected the Alberta population.

TABLE 9

AGE DISTRIBUTIONS FOR ALBERTA AND AAS

AGE GROUPS	POSTCENSAL ALBERTA 1988	AAS 1989
	%	%
20-29 YEARS	27.2	26.0
30-39 YEARS	26.2	28.5
40-49 YEARS	17.0	18.7
50-59 YEARS	12.1	11.4
60+ YEARS	17.5	15.4
	100.0	100.0
Index of Dissimilarity: 4.0		

5 Statistics Canada. "Postcensal Annual Estimates of Population by Marital Status, Age, Sex and Components of Growth for Canada, Provinces and Territories, June 1, 1988." Catalogue 91-210. Ottawa.

6 The index represents the proportion of households that would have to move to a different category to make the distributions identical. The index can vary from 0 to 100. Any index less than 10 indicates that the distributions are similar. Source: Duncan, O.D., and Duncan, B. "Residential Distribution and Occupational Stratification." American Journal of Sociology, 60(5):493, March 1955.

TABLE 10

ALBERTA AND AAS MARITAL STATUS DISTRIBUTIONS FOR RESPONDENTS 20 YEARS OF AGE OR OLDER

MARITAL STATUS	POSTCENSAL ALBERTA 1988	AAS 1989
SINGLE	19.4%	16.8%
MARRIED*	69.3	71.1
DIVORCED	5.8	6.6
WIDOWED	5.6	5.5
	100.1%	100.0%
Index of Dissimilarity: 2.7		

*Includes persons now married, separated (legally or otherwise but not divorced) and persons living in common-law unions.

AAS 1990 TIMETABLE

Those persons and organizations who are interested in submitting questions for the 1990 project on a time-sharing basis should contact the Director of the PRL before the end of September (1990).

AAS & EAS TIMETABLE	
4th week of September	- deadline for question submission
2nd week of November	- pretest questionnaire finalized
3rd week of November	- pretest
3rd week of December	- questionnaire finalized
1st week of February	- interviewer training
February and March	- data collection
April and May	- coding, data entry, and data cleaning
June 30th	- data ready for analysis

APPENDIX A

SELECTED TOPICS INCLUDED IN THE 1989 AAS AND EAS

I. Demographic Characteristics of Population

Age, sex, marital status, education, income, religion, ethnicity, and occupation

II. Marriage and Family

A. Attitudes
B. Family background
C. Marital history
D. Fertility
E. Satisfaction
F. Relationships
G. Roles
H. Household responsibilities
I. Commitment
J. Husband and wife working

III. Health

A. Smoking behaviour/attitudes
B. AIDS issues

V. Crime and Policing

A. Assessments of policing
B. Criminal justice system

VII. Other Issues

A. Aging
B. Professional groups
C. Saving and investing
D. Landfill site
E. Retirement
F. Canadian defence
G. Political party preference
H. Abortion